Workshop Report

Intimacy and Sexuality: Toward a Lifespan Perspective

An Interdisciplinary Workshop of the
INTERNATIONAL LONGEVITY CENTER–USA

Sponsored by
International Longevity Center-USA
Canyon Ranch
Canyon Ranch Institute

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Dedication

The authors dedicate this publication in memory of
Myrna I. Lewis, Ph.D.
(1938–2005)
for, among her many contributions, advancement of
understanding about and compassion for older adult sexuality.

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Executive Summary

Public discourse about human sexuality spans history, cultures, societies, religions, political and legal systems, artistic expressions, literature, and the media. Sexual expression and intimate relationships have been linked to many health benefits, including longevity, fitness, sleep, fertility, mental well-being, and promotion of marital bonding.[1-2] Sexuality and intimacy comprise essential elements of individual identity, interpersonal bonding, and health throughout the lifespan. As stated by former U.S. Surgeon General David Satcher: "It [sexuality] fulfills a number of personal and social needs, and we value the sexual part of our being for the pleasures and benefits it affords us. Yet, most discussion and research pertaining to sexuality derives from problematic aspects of sexual expression and behavior."[1]

Indeed, many of the world's largest public health problems stem from sexual behavior, including cervix cancer (the leading cause of cancer death among women, globally;[3] caused by sexual transmission of the human papilloma virus), unwanted pregnancy, HIV/AIDS and other sexually transmitted infections, sexual or partner violence, and sexual exploitation. More recently, sexual dysfunction has gained recognition as a highly prevalent public health problem, affecting large numbers of men and women at younger and older ages. Sexual dysfunction may herald underlying physical or mental illness or result from illness, disease, or medical and surgical treatments. As Americans live longer and more healthily, they are capable of more years of sexual and intimate expression, yet barriers ranging from negative social attitudes to side effects of many commonly used medications threaten opportunity for, and quality of, sexual life. In addition, political, social, and cultural forces as well as methodological limitations hinder scientific and sociological understanding about sexuality, and, as a consequence, limit interventions to maximize positive aspects and mitigate negative elements of sexual relationships and life.[1]

Despite an inundation of sexual imagery and innuendo in popular Western culture and a massive sexual marketplace fueled by the Internet, a frank, evidence-based, constructive consideration of the meaning and importance of sexuality for health, quality of life, and the human experience is lacking. Between spouses, parent and child, clergy and congregant, teacher and student, even physician and patient, frank discussion of sexual problems or preferences and promotion of sexual self-awareness or knowledge rarely occur.

The taboo nature of sexual expression and discourse preserves the illusive and mystical allure of the most intimate of human interactions. Indeed, the illicit nature of sex consumerism due to restriction of access to sex-related information, products, services, and entertainment creates a caché that attracts sex industry demand.[4] In contrast, absence of knowledge and censorship of discussion or inquiry about human sexuality result in, at best, unnecessary anxiety and confusion, and, at worst, suffering, disease, ignorance, and dysfunction.

Although a small minority of adults chooses complete abstinence or celibacy, the vast majority regularly engages in some sexual experience and

expression.[5] Furthermore, while the mode and meaning of sexual expression may fluctuate throughout the life course, physical and psychological sexual development begin in early childhood and continue through puberty, adolescence, childbearing, and middle and late adulthood. Life-stage events such as marriage, employment, illness, menopause, widowhood, and retirement also exert important influences on sexuality and intimate interpersonal relationships; likewise, the quality of, and opportunity for, sexual and intimate relationships can affect progression through life stages. Little is known, however, about the mechanisms through which sexuality and health influence one another, particularly at older ages.

Political and religious censorship threatens the scientific study of human sexuality, evidenced by recent attempts to legislate against National Institutes of Health funding for sexuality-related research.[6] Arguments against advancement of sexual knowledge claim that sexuality lies outside the domain of health or that sexuality research promotes irresponsible or immoral sexual behavior.[6] In contrast, proponents of research that aims to better understand human sexuality and intimacy believe in the salubrious effects of knowledge and recognize that deeper understanding of human sexual behavior enlightens broader efforts to explain other mind-body phenomena such as human motivation, bonding, stress, and appetite.

Better and more accessible knowledge and understanding of the ways in which sexuality influences health, and vice versa, are relevant for physicians, policymakers, employers, educators, and the public. Such research will provide a scientific base of information for advising people about positive intimate and sexual relationships as well as designing policies and programs to capitalize on, preserve, and promote these relationships. Such interventions may be important for prolonging productivity and independence, relieving anxiety, reducing morbidity, and preventing dysfunction or disease throughout the life course.

Future research needs to include advancements in substantive knowledge about sexuality, in methodologies for studying the biological, psychological, and social interactions that comprise human sexuality, and in applicable theoretical models to conceptualize sexuality and intimacy, including:

Advancements in substantive knowledge:

- Societal and individual-level consequences of sex-enhancing drugs and drugs to treat erectile or other sexual dysfunction.
- Sexual development and issues associated with sexuality during childhood and adolescence.
- Effect of life course events, including marriage, childbearing, divorce, illness, and injury on sexuality and the effects of sexuality and intimacy on these life events.
- Sexual minorities across the second half of life.

Advancements in research methodologies:

- Standardized means for measuring key domains, including sexual health and satisfaction.
- Innovative measures to enhance self-report of sexual behavior.
- Inclusion of generation-cohorts in life-course study of sexuality and development of cross-sequential designs.

Advancements in theoretical models:

- Integrative, interactive theoretical frameworks that are valid and useful for research regarding sexuality and intimacy.
- Agreement on theories most appropriate for interdisciplinary study of sexuality.

Intimacy and Sexuality: Toward a Lifespan Perspective

THE PURPOSE OF THIS REPORT

While the marketplace for sex-related goods and services, including drugs to remedy sexual dysfunction or enhance sexual experience, appears to be expanding exponentially,[7] sexuality and intimacy are poorly understood aspects of human life and health. At some point, most adults experience sexual problems, concerns, or dysfunction,[8] but physicians and other health care providers are poorly equipped to elicit discussion of or to treat these problems. Furthermore, social, cultural, and religious traditions largely exert negative influence on an individual's capacity for sexual self-knowledge and communication about sexual concerns. Ageist attitudes and overlapping health concerns further divert awareness and attention from sexual issues and exacerbate the problem for older adults. Physicians, the public, and policymakers alike assume that sexual expression and function inevitably wane and deteriorate with age. Even when sexual problems are anticipated or correctly diagnosed, a paucity of effective therapies prohibits treatment. To address these problems, a small consensus workshop of leading researchers on sexuality, intimacy, and aging was convened to review and evaluate current data on:

- sexuality and intimacy as part of a healthy lifestyle throughout life
- causes and impact of problems relating to sexuality and intimacy
- pharmaceutical and other therapeutic interventions.

The workshop aimed to identify research gaps and disagreement about current data, to construct a research agenda for future work, and to make recommendations in order to assist individuals in maintaining a healthy sexual and intimate life into their later years.

SEXUALITY, HEALTH, AND THE LIFESPAN

Sexuality involves an elegant and highly integrated system of biophysiological, psychological, and social functions, and provides perhaps the most tangible evidence for mind-body interconnectedness.[9] Sexual function is an important component and indicator of overall health and well-being; sexual problems or dysfunction may result from, or even cause, physical or mental illness or deterioration in important social relationships.[8]

Expression, experience, and meaning of sexuality and intimacy are dynamic and fluctuate throughout the lifespan. Satisfaction with sexual life, attitudes about sexuality, and self-rated sexual performance vary by age, gender, and partnership status. Other factors, such as generational effects, religiosity, and health also influence the quality of the individual's sexual life.[8] However, the widespread assumption that sexual problems and dysfunction are a natural or inevitable part of the aging process has been disproved.[8] Data indicate that while sexual activity decreases with age overall and relationship duration in particular, the prevalence of sexual problems or dysfunction cannot be

attributed exclusively to aging.[8] Rather, the prevalence of sexual problems is high in that population due to a variety of coexisting factors common in late life, including waning opportunities for partnership, presence of disease, or other concurrent age-related processes.[10-12]

Sexuality in childhood and adolescence

Human sexual development involves a complex choreography of hormonal, neurological, and psychological events that begin *in utero* and evolve throughout the life course. Intimate relationships between child and parent, child and siblings, and peers form a nexus of bonds and experiences that are critical for social and sexual functioning throughout life.[1] While partnered sexual interactions typically do not occur before puberty, masturbation begins in early childhood and is a normal, innate behavior in human sexual development.

The preponderance of research on sexuality in early life pertains to sexual abuse rather than normal sexual development.[13] Recent evidence indicates that sexually abused children are more likely to experience or practice psychological symptoms in childhood, including fear, post-traumatic stress disorder, cruel behavior, self-injury, and inappropriate sexual behavior. They are also more likely to have mental illness. As adults, individuals subjected to childhood sexual abuse may suffer from sexual dysfunction and decreased sexual satisfaction. Women with sexual abuse histories may also be more likely to engage in sexual behaviors that pose risk for their health, such as earlier onset of sexual activity and unprotected intercourse.[13]

The onset of adolescent sexual activity has been linked to numerous familial factors, including the quality of the parent-child relationship.[1] Adolescents who report close relationships with parents are more likely to delay sexual intercourse or to use contraception if sexually active. The deferment of adolescent sexual activity, as well as a proclivity for safer practices if sexually active, is also associated with higher parental education and income, and sufficient parental supervision.

Knowledge about childhood and adolescent sexuality is limited by ethical and methodological barriers to such research, including cultural reluctance to question minors about their sexuality and the inability to directly observe such behavior.[13] Again, most research and policy focuses on combating negative consequences of adolescent sexuality, including unplanned and unwanted pregnancy, sexually transmitted infection, and sexual assault or abuse. Research indicates that teens who are informed about the benefits of abstinence and contraception are less likely to engage in risky sexual behavior.[14] Curricula restricted to abstinence-only messages, while not thoroughly studied, have not been shown to meaningfully reduce teen pregnancy or delay sexual activity.[14] Despite this, federal spending on abstinence-until-marriage sex education has grown exponentially over the last ten years to $167 million in FY2005.[15] Additionally, a 2004 report for U.S. Rep. Henry Waxman (D-CA) finds pervasive misinformation in the most widely used federally funded abstinence education curricula,[14] including:

- grossly underestimating the effectiveness of condoms and other contraceptives in prevention of pregnancy and STD
- making false claims about the physical and psychological risks of abortion
- offering misinformation on the incidence and transmission of STDs
- replacing scientific facts with religious views and moral judgments
- distorting medical evidence and basic scientific facts.[14-15]

Intimacy and sexuality in marriage, pregnancy, and childbearing years

A great deal of evidence attests to the importance of marital status to overall health. Being married, which almost always implies sexual activity,[5] has been shown to have consistently positive effects on health and longevity that do not appear to reflect only selection into marriage.[16-18] Sexual activity is not restricted to the married, but, in practice, virtually all married (and all cohabiting) adults are sexually active, a sizable minority of those who are not married or cohabiting are sexually inactive, and frequency of sexual activity is substantially lower among those who are unmarried and not cohabiting.[5] At older ages, married men and women face lower risks of sexual dysfunction than the unmarried of the same age. And for older women, much more than for older men, opportunity for sexual activity depends almost entirely on being married.[19]

The relationship between marriage or other long-term partnerships and health likely fluctuates throughout the course of the relationship. Over time, marriages become more stable;[20] the probability of a marriage ending is highest during the early years of marriage when between 4 to 5 percent end each year. Among marriages that survive 10 to 15 years, about 2 percent fail each year; a marriage that lasts 20 years or more has a 1 in 100 annual "failure rate." Marital happiness is highest at the wedding and falls sharply during the early years, particularly with childbearing.[21] The degree to which the sexual and intimate aspects of marital relationships influence marital quality and longevity is poorly understood, particularly at older ages. However, marital stress is a known, important cause and consequence of sexual problems.[22]

Childbearing and breastfeeding have a major impact on the biological, psychological, and social aspects of sexual function, expression, and opportunities for intimacy. Although population norms of sexual behavior in pregnancy have not been established, wide variation between individuals is apparent. Furthermore, sexuality prior to pregnancy appears closely predictive of sexuality during pregnancy.[23]

For some couples, pregnancy liberates sexual life by alleviating need for contraception, by solidifying the psychological bond between partners, by affirming potency and virility[23] and for some by enhancing the physiological and/or psychological response to sexual interactions and orgasm. In other cases, particularly when infertility treatment or medical complications of pregnancy occur, pregnancy can negatively affect sexual and intimate interactions. Although couples frequently worry about their sexual interactions during and following pregnancy, attention to these matters is largely restricted to discussions about postpartum contraception and prevention of sexually transmissible diseases.

Sexuality at older ages

An unprecedented demographic shift in the age of our population, combined with major medical advances in the treatment of acute and life-threatening illness, means individuals are living longer and healthier lives with more opportunity for sexual and intimate experiences. Sexual and intimate relationships grow, stagnate, dissolve, and form for many older adults alongside treatment of medical conditions. A massive pharmaceutical marketplace has capitalized upon this reality and has also permitted some older adults to resume or increase their sexual activity. Additionally, a renaissance in treatments for male and female infertility that includes resurrection or preservation of reproductive capacity even in individuals with life-threatening illness has resulted in significant prolongation of the active childbearing period. As a result, couples must face and cope with the impact of childbearing and rearing on

their sexual and intimate lives during a longer portion of the lifespan and at older ages.

Despite very high estimates of sexual dysfunction at older ages, an exploding industry in the development and marketing of drugs targeted to older adults to treat sexual dysfunction or enhance sexual pleasure, and the unprecedented shift in the demographics of the U.S. population, dangerously little is known about sexuality among adults age 60 and older. Generalizable data about sexuality at older ages in the United States do not exist, yet negative attitudes, stereotypes, and anxieties abound. Credible information is needed by health care providers, the public, and policymakers to provide older adults with realistic evidence-based expectations about sexual function and risks at older ages and to improve clinical care of older adults with sexual concerns, among a number of other needs.

Although research regarding sexuality at older ages is currently limited, a handful of specific studies in the area of sexuality and aging have produced significant findings, including noteworthy gender differences. Men tend to be more sexually active in later life than women. Women report lack of a partner as the primary reason for diminished sexual activity in later life, and partner availability is the greatest predictor of sexual desire among women. Women ages 18 to 64 are just as likely as women ages 65 and older to have concerns about diminished interest in sex, sexual aversion, desires different from those of their partners, and unmet sexual needs.[24] Health status, including illness and medication use, influences levels of sexual activity in both genders but is a stronger indicator of decreased sexual activity for men. The prevalence of erectile dysfunction (ED) nearly doubles between the ages of 40 and 65, with the greatest risk factor for ED being age, followed by medical conditions and lifestyle.[11,25] Finally, for both genders, health status and partner availability appear to be more pertinent to sexual functioning than to chronological age.[26]

Intimacy and sexuality in the context of illness

Many relatively small, clinic-based studies suggest strong negative and lasting effects of medical conditions and treatments on sexuality and intimacy, although very little attention has been given to preventing or alerting patients to these consequences. In the realm of science, human sexuality is variably contemplated as an evolutionary force, a mechanism of species survival and propagation, a largely unobservable phenomenon, and a root cause (or consequence) of pathology, disease, or illness. Based on the traditional biomedical model, for example, physicians' concern about sexuality derives primarily from diseases that are sexually transmitted, problematic conditions such as unwanted or adolescent pregnancy, abortion, sexual exploitation or rape, or, more recently, sexual dysfunction.

Prescription drugs, used increasingly as people age and face various illnesses, often have damaging effects on sexual desire and function.[7,27] Physicians tend to overlook the sexual side effects caused by many prescription medications, particularly in older adults who are already perceived as disinterested and detached from sexuality and intimacy. Prescription drugs have been found to account for at least 25 percent of sexual problems in men and are believed also to have a profound impact on women's sexual desire and function.[7] Antidepressants, sedatives or anxiolytics, and antihypertensives are the classes of drugs most often associated with lack of sexual desire and sexual dysfunction.[7] Hormonal contraceptive therapies have also been implicated in sexual problems, including low sexual desire and vaginal dryness.[28] Together, these classes of drugs are the most commonly prescribed and consumed.

CAUSES AND IMPACT OF PROBLEMS RELATING TO SEXUALITY

Sexual response cycle

The physiological sexual response cycle, which differs for men and women, is comprised of sexual desire, followed by excitement or arousal, orgasm or climax, and resolution or recovery.[7,29] The female sexual response cycle includes emotional and psychological components that significantly impact other phases of the cycle.[30] As men age and testosterone levels decline, the sexual response cycle becomes more similar to that of women, with a prolonged phase of excitement and a greater need for tactile stimulation and foreplay.[31] However, lack of awareness regarding such changes in the cycle often causes unnecessary anxiety in aging men, who perceive such variations as abnormal.

Attraction and rejection

The natural decline of olfactory functions, along with other sensory functions as people age, may impact sexual functioning. Olfaction appears to be associated with sexuality through regulation of emotional states conveyed through scents and odors, particularly in young adults.[32] The significance of sensory modalities varies by sex, with olfaction and taste stimuli being the most important for females and vision the most important for males. Therefore, it is likely that women's sexuality may be more significantly impacted than men's with the decline of olfactory functioning in later years.[32]

Sexual health

Sexual health has emerged as a key concept in defining and understanding sexuality and sexual dysfunction, though the term's meaning and use are regularly debated.[33] The Sexuality Information and Education Council of the United States defines sexual health in developmental terms, referring to the process of becoming sexually healthy as "a key developmental task of adolescence":

> Sexual health encompasses practicing health-promoting behaviors and such characteristics as the ability to develop and maintain meaningful interpersonal relationships; appreciate one's own body; interact with both genders in respectful and appropriate ways; and express love and intimacy in ways consistent with one's own values.[34]

Planned Parenthood/Chicago area articulates the behaviors exhibited by a "sexually healthy person" consistent with values (attitudes, cultural influences, and beliefs) and knowledge about human reproductive anatomy and physiology.[2] In his 2001 *Call to Action to Promote Sexual Health and Responsible Sexual Behavior*, former Surgeon General Satcher states:

> Sexual health is not limited to the absence of disease or dysfunction, nor is its importance confined to just the reproductive years. … It includes freedom from sexual abuse and discrimination and the ability of individuals to integrate their sexuality into their lives, derive pleasure from it, and to reproduce if they so choose.[1]

Critiques of such definitions argue that these terms are ill-defined, culturally skewed toward a Western concept of sexuality, and offensive in the implication that asexual individuals, for example those who choose celibacy, are relegated to a status of inferior health. An extreme conservative view asserts that the definition of sexual health be restricted to that which occurs within heterosexual marriage for the sole purpose of procreation. Any other expression of sexuality would be unhealthy.[33]

Sexual dysfunction

Sexual dysfunction typically involves a lack of desire for or pleasure from sexual activity, an inability to experience or control orgasm, or a

physiological obstacle that inhibits effective sexual arousal or interaction.[8,35] According to the World Health Organization's (WHO) *International Classification of Diseases* (10th edition, ICD-10), a diagnosis of sexual dysfunction includes the following criteria: 1) inability to participate in a sexual relationship as one would like; 2) the dysfunction is frequently present though may be absent at times; 3) the dysfunction has persisted for at least six months; 4) a physical disorder, drug treatment, or other mental or behavioral disorder is not entirely responsible for dysfunction.[36] Additionally, the *Diagnostic and Statistical Manual of Mental Disorders* (4th edition, DSM-IV) requires that the sexual dysfunction produce significant distress or interpersonal difficulties for the individual experiencing the problem.[37]

Sexual addictions

Sexual addiction, a controversial term and syndrome, has been likened to other forms of addiction and derived from models of substance addiction.[38] Though not formally considered in the DSM-IV, the phenomenon of a person whose entire life revolves around sex-seeking behavior and activities, who spends an excessive amount of time in such behavior, and who often tries to stop such behavior but is unable to do so is a well-accepted clinical scenario.[38] Sexual addicts compulsively seek out sexual activity and become dysfunctional if unable to gratify sexual impulses.[39] Based on psychological theory, sexual addicts are unable to self-regulate emotionally, and use sex as a means to self-soothe and to prevent fragmentation of one's sense of self. Biological theorists hypothesize that sexual addiction, like other addictions, involves the brain's reliance on the release of dopamine, serotonin, and endorphins triggered by the addictive activity, which in turn drives the pathological behavior.[38,40] Applying this definition, an estimated 5 to 6 percent of people are afflicted with sexual addictions.[41]

Causes of sexual dysfunction: Bio/psycho/social

Intimacy and sexuality comprise important but frequently overlooked aspects of health and quality of life.[1] The medical model approach to understanding sexuality focuses on sexual dysfunction as a problematic consequence of aging, disease, or treatment. Occasionally, medical texts suggest that patient complaints about sexual problems, particularly erectile difficulties, may herald serious underlying disease and ought not be ignored. While clinically valid, this narrow conceptualization of sexuality defies its multidimensional nature and limits understanding about the meaning of sexuality for health. A broader framework, as defined by the Interactive Biopsychosocial Model,[9] conceptualizes the bidirectional relationship between sexuality and health. In this model, sexual dysfunction can be a consequence of or precursor to mental and physical illness. Additionally, health and sexual consequences of aging, illness, or disease can be disadvantageous or advantageous.

Sexual orientation, gender, and discrimination

The sexual well-being of gay men and lesbians is influenced throughout the life course, often beginning in adolescence when issues of stigma present barriers to addressing sexuality with parents, friends, classmates, and physicians. Issues regarding sexuality in the lives of older gay men and lesbians are based in large part on the generation cohort of which they are a part. For instance, the current cohort of older lesbians and gay men cited stigma attached to their sexual orientation as especially significant.[42] Although the concerns of aging gay men and lesbians tend to be comparable to heterosexuals of similar age, years of stigma and discrimination often complicate the experience of growing older. Later life adjustment may be particularly difficult for those who felt a need to hide their sexual orientation. Those gay and lesbian elders who internalized heterosexist values and remained

secretive about their sexual orientation throughout their lives show relatively poor adjustment and lower morale in later life. By contrast, findings conclude that lesbian and gay elders who had generally been open regarding their sexual orientation are more active, happier, and better adjusted in later life.[42] It is also significant to note that gay men who are part of a couple tend to have fewer sexual problems than their single counterparts, accountable at least in part, reportedly, to lower levels of shame concerning their sexual orientation.

PHARMACEUTICAL AND OTHER THERAPEUTIC INTERVENTIONS

Psychosocial therapies

Nearly all sexual problems and intimacy issues involve important emotional elements.[7] Therefore, psychotherapy or counseling can be quite effective in treating older adults with sexual dysfunction by providing an opportunity to explore, understand, and address past issues as well as the current concerns. Especially in the face of physical deterioration and decline, psychotherapy provides an opportunity for psychological growth and improved interpersonal functioning. Psychotherapy may also assist older adults in transitioning priorities and focus from career and success to relationship and intimacy.[43] Marital counseling and sex therapy may be particularly helpful for those with sexual and intimacy problems.[7]

Psychoanalysis, an intensive mode of individual psychotherapy, has perennially been deemed inappropriate for older adults because their lives may not be long enough to warrant the time, effort, and cost associated with the method.[44] However, research indicates that psychoanalytic treatment of older adults provides a renewed opportunity to work through early negative experiences and change maladaptive patterns that may have persisted for as long as decades. As noted by Simburg, "[D]evelopment continues throughout the life course, … the chronological age of the adult by itself is not an indicator of the eligibility or of suitability for psychoanalysis."[45] Analytic work with older adults fosters enhanced drive and energy and encourages the acknowledgement of additional life goals. Furthermore, it provides insight into the "meaning of loss and change across the course of life" and may serve as "an important psychosocial intervention as older adults make peace with self, lived experience, and their own mortality, striving to maintain continued personal vitality into oldest age."[45]

Medical treatments

In recent years, oral medications such as sildenafil citrate (Viagra™) have proven to be highly effective and popular in treating sexual dysfunctions, specifically male erectile dysfunction or impotence.[7,27] Sildenafil and related drugs, including vardenafil (Levitra™) and tadalafil (Cialis™), have emerged among the most successful drugs ever brought to market. Researchers are now rushing to develop drugs, including testosterone patches and gels, to treat women's sexual dysfunction, though women's receptivity to such medical interventions has yet to be established. The massive and growing marketplace for drugs to treat sexual dysfunction and enhance sexual pleasure flourishes. The intensified search for new pharmacological solutions for sexual dysfunctions has sparked interest and promoted knowledge in the field of sexual functioning. On the other hand, concern has emerged that the quick-fix appeal of medical therapies may overshadow psychosocial research and interventions and may limit the preferred treatment modality, which integrates both approaches.[27]

Other forms of medical treatment for sexual dysfunction include external clitoral/penile vacuum devices, penile implants, and revascularization (surgery to restore normal blood circulation to the penis).[7]

FUTURE DIRECTIONS AND RECOMMENDATIONS

Credible information is needed by the public, physicians and other health care providers, and policymakers in order to alleviate shame, ignorance, and stigma associated with honest, truthful, and informed discourse around sexuality in our society. Information is also needed to address major public health problems stemming from sexual behavior and to maximize health, quality of life and long-term maintenance of healthy interpersonal relationships. Additionally, scientific investigation and understanding of sexuality will advance knowledge about mind-body interconnectedness and the mechanisms through which interpersonal relationships influence individual health. These include:

- Longitudinal studies to confirm the causal relationship between sexuality and health throughout the life course and to determine the effects of sexuality and intimacy on longevity, illness, relationship stability, and mortality.
- Description and publicity of population-based statistical norms about sexual behavior, function, and dysfunction throughout the life course to help alleviate anxiety, ignorance, to promote realistic expectations, and facilitate seeking of health care when problems arise.
- Normative, longitudinal data to expand understanding of the dynamics between sexuality, health, relationship quality, and family well-being during childbearing years, comparing couples who do and do not have children.
- Education and training of health care providers with regard to communication about sexual health concerns to improve patient care.
- Development of comprehensive sexual education programs for parents, clergy, and young people.
- Work and interventions that address negative and restrictive societal and institutional (e.g., assisted-living or nursing care facilities) stereotypes and policies about older adult intimacy and sexuality.
- A public health information outreach regarding prevention of sexually transmitted disease, sexual violence, and sexual exploitation of older adults.
- Improved methods for scientific study of sexuality.
- Studies of reversibility of sexual dysfunction that has already occurred. Perhaps psychological dysfunction is the sector that will be most treatable by psychotherapy. Adequate support for design and implementation of careful quantitative studies of process and outcome. Outcomes should not be restricted to reduced sexual dysfunction but include an exploration of physical health effects as well as reduction in anxiety, depression, and suicidality as mental disorders.

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The International Longevity Center-USA (ILC-USA) is a not-for-profit, nonpartisan research, education, and policy organization whose mission is to help individuals and societies address longevity and population aging in positive and productive ways, and to highlight older people's productivity and contributions to their families and society as a whole.

The organization is part of a multinational research and education consortium and includes centers in the United States, Japan, Great Britain, France, the Dominican Republic, India, Sub-Saharan Africa, and Argentina. These centers work both autonomously and collaboratively to study how greater life expectancy and increased proportions of older people impact nations around the world.

Intimacy and Sexuality: Toward a Lifespan Perspective

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